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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/070,078 | 03/01/2002 | Stephen Gwyn Ballard | 102019-102 | 7259 |
| 34138 | 7590 | 09/22/2004 | EXAMINER | |
| COZEN O'CONNOR, P.C. 1900 MARKET STREET PHILADELPHIA, PA 19103-3508 | | | MAYEKAR, KISHOR | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1753 | |

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/070,078 | Applicant(s) BALLARD, STEPHEN GWYN | |
| | Examiner Kishor Mayekar | Art Unit 1753 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 and 37-47 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-33 and 37-47 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>10/2002</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-33 and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the phrase "which extracts" needs to be replaced with --for extracting-- to eliminate reference to method of operating the device. The same is applied to the phrases "delivering", "driving" and "coupled" with -for delivering--, --configured to drive-- and --configured to be coupled--, respectively. The phrase "the flow path" and "the flow" lack antecedent basis.

In claim 3, the same is applied to claim 1 to the phrase "which extracts", "delivering", and "coupled".

In claim 5, the same is applied to claim 1 to the phrases "which extracts", "effective to permit", "delivering", "isolated" and "coupled".

In claim 6, the phrase "the portion" lacks antecedent basis.

In claim 8, the same is applied to claim 1 to the phrases "which extracts", "shiftable" and "coupled".

In claim 9, the phrase "the operational position" lacks antecedent basis.

In claim 11, the same is applied to claim 1 to the phrase 'is moveable".

In claim 14, the same is applied to claim 1 to the phrase "which extracts", "delivering", "coupled", and "supported". The phrase "the outlet" lacks antecedent basis.

In claim 16, the same is applied to claim 1 to the phrase "which extracts", "delivering", "coupled", "receiving", and "being reciprocally moveable".

In claim 17, the same is applied to claim 1 to the phrases "are closeable", "being fixed" and "being moveable".

In claim 18, the same is applied to claim 1 to the phrase "which extracts", "delivering", "coupled", "containing" and "moveable".

In claim 19, the same is applied to claim 1 to the phrase "rotatable".

In claim 20, the phrase "a the vessel" is confusing.

In claim 25, the same is applied to claim 1 to the phrase "which extracts", "delivering", "coupled", "receiving the wire", "admitting the wire", "to introduce" and

"maintain an internal pressure". The phrase "a balancing source (514) connected so as to introduce" is incomplete.

In claim 27, the same is applied to claim 1 to the phrase "having".

In claim 37, the phrase "0.5 :m" is incorrect and the phrase "the desired portion" lacks antecedent basis.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 37-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0718061 A1 in view of Applicant's admission. EP '061's invention, a reference cited by Applicant, to metal powders of submicron particle size such as aluminum produced by electro explosion of wires (see abstract). The difference between

the reference and the above claims are the selection of the particle size and the provision of the step of passivating.

As to the former, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the reference's teachings because it has been settled that proper adjustment of a known effective variable of a known or obvious process is within the capabilities of one having ordinary skill in the art. *In re Aller* 105 USPQ 233; *In re Boesch* 205 USPQ 215.

As to the latter, Applicant admits in the Background of the Invention that the step is known. The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the reference's teachings because this would result in protecting the fine metal particles.

Allowable Subject Matter

5. Claims 1-33 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

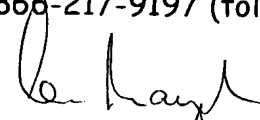
6. The following is a statement of reasons for the indication of allowable subject matter: Because none of the prior art references discloses

- in an apparatus for the production of powder from a wire the provision of the recited extractor in combination with other recited structures as claimed in claims 1, 2, 5-7, and 14-17;
- in an apparatus for the production of powder from a wire the provision of the recited recirculating gas path and extractor in combination with other recited structures as claimed in claims 3-4, 8-13, and 18-33.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kishor Mayekar
Primary Examiner
Art Unit 1753